

CLAIMS

What is claimed is:

1. A high pressure fluid jetting system comprising:
a fluid cylinder pump;
a pressure assembly within said fluid cylinder pump; said pressure assembly comprising an outer pressure member and an inner pressure member having an angled interference surface therebetween; and
a plunger reciprocally movable within said pressure assembly.
2. The system as recited in claim 1, wherein said fluid cylinder pump operates at approximately 50,000 pounds per square inch of pressure.

3. A pressure assembly for a high pressure fluid jetting system comprising:
an outer pressure sleeve; and
an inner pressure sleeve, said outer pressure sleeve and said inner pressure
sleeve having an angled interference surface therebetween.

4. The assembly as recited in claim 3, wherein said inner pressure sleeve is
pressed into said outer pressure sleeve during assembly of the high pressure fluid jetting
system.

5. A valve seat assembly for a high pressure fluid jetting system comprising:
an outer valve seat; and
an inner valve seat, said outer valve seat and said inner valve seat having
an angled interference surface therebetween.

6. The assembly as recited in claim 5, wherein said angled interference surface is
angled at a relatively small angle.

7. The assembly as recited in claim 5, wherein said inner valve seat is maintained in
compression by said outer valve seat.

8. A seal cartridge assembly for a high pressure fluid jetting system comprising:
an outer seal cartridge;
an inner seal cartridge, said inner seal cartridge and said outer seal
cartridge having an angled interference surface therebetween; and
a packing assembly within said inner seal cartridge.
9. The assembly as recited in claim 8, wherein said inner seal cartridge is
maintained in compression by said outer seal cartridge.
10. The assembly as recited in claim 8, wherein at least one corner of said inner
seal cartridge includes a radius.
11. The assembly as recited in claim 8, wherein at least one corner of said outer
seal cartridge includes a radius.
12. The assembly as recited in claim 8, wherein said outer seal cartridge heated
prior to assembly to said inner seal cartridge.
13. The assembly as recited in claim 8, wherein said packing assembly includes a
multiple of non-metallic packings.
14. The assembly as recited in claim 13, wherein each of said non-metallic
packings are ring-like members.
15. The assembly as recited in claim 13, wherein each of said non-metallic
packings are substantially square in cross section.

16. The assembly as recited in claim 8, wherein said packing assembly includes an inner diameter wedge ring adjacent an outer diameter wedge ring.

17. A packing assembly for a high pressure fluid jetting system comprising:
multiple of non-metallic packings;
an inner diameter wedge ring; and
an outer diameter wedge ring.
18. The assembly as recited in claim 17, wherein said packing assembly includes
a multiple of non-metallic packings.
19. The assembly as recited in claim 17, wherein each of said non-metallic
packings are ring-like members.
20. The assembly as recited in claim 17, wherein each of said non-metallic
packings are substantially square in cross section.